Nuclear Instruments and Methods in Physics Research A285 (1989) 551–560
North-Holland, Amsterdam

AUTHOR INDEX

Aab, V., K. Alrutz-Ziemssen, H. Genz, H.-D. Gräf, A. Richter, H. Weise and A. Gaupp, Status of the Darmstadt near-infrared free-electron-laser project . . . A285 (1989) 76
Akiba, T., see Mima, K. . . . A285 (1989) 47
Alexeff, I., F. Dyer and M. Rader, Recent results on the Orbitron Maser . . . A285 (1989) 228
Alrutz-Ziemssen, K., see Aab, V. . . . A285 (1989) 76
Amenomori, M., see Nishizawa, M. . . . A285 (1989) 532
Ando, Y., see Kubota, S. . . . A285 (1989) 436
Antonsen Jr, T.M., see Booske, J.H. . . . A285 (1989) 92
Antonsen Jr, T.M., see Levush, B. . . . A285 (1989) 136
Apgar, S.A., see Lumpkin, A.H. . . . A285 (1989) 343
Arefiev, A., see L3 Collaboration . . . A285 (1989) 403
Atkinson, D.P., see Jong, R.A. . . . A285 (1989) 379
Azemoon, T., see L3 Collaboration . . . A285 (1989) 403

Bal, R., see L3 Collaboration . . . A285 (1989) 403
Balleyguier, P., see Dei-Cas, R. . . . A285 (1989) 320
Bamford, D.J. and D.A.G. Deacon, Measurement of the coherent harmonics emitted in the Mark III free electron laser . . . A285 (1989) 23
Bardy, J., see Dei-Cas, R. . . . A285 (1989) 320
Bates, J.C., see Tervisidis, F. . . . A285 (1989) 431
Bazin, C., see Couprie, M.E. . . . A285 (1989) 31
Bekefi, G., see Kirkpatrick, D.A. . . . A285 (1989) 43
Bekefi, G., A. Dirienzo, C. Leibovitch and B.G. Danly, A 35 GHz cyclotron autoresonance maser amplifier . . . A285 (1989) 230
Bekefi, G., see Chen, S.C. . . . A285 (1989) 290
Belbeoch, R., see Ortega, J.M. . . . A285 (1989) 97
Ben-Zvi, I. and J.M. Wachtel, Computation of emittance growth in a focusing wiggler FEL . . . A285 (1989) 364
Bergher, M., see Ortega, J.M. . . . A285 (1989) 97
Bertin, A., see Dei-Cas, R. . . . A285 (1989) 320
Best, R.W.B., see Van Amersfoort, P.W. . . . A285 (1989) 67
Best, R.W.B., see Oepts, D. . . . A285 (1989) 204
Best, R.W.B., B. Faatz, D. Oepts, P.W. Van Amersfoort, E. Jerby and T.-M. Tran, 3D particle simulation and 3D linear model analysis of FELIX . . . A285 (1989) 211
Bhattacharjee, A., S.Y. Cai, S.P. Chang, J.W. Dodd and T.C. Marshall, Sideband instabilities and optical guiding in a free electron laser: experiment and theory . . . A285 (1989) 158
Billardon, M., see Couprie, M.E. . . . A285 (1989) 31
Bluem, H., see Pershing, D.E. . . . A285 (1989) 56
Bluem, H., see Freund, H.P. . . . A285 (1989) 169
Bobin, J.L., see Briand, J.P. . . . A285 (1989) 547
Bonetti, Cl., see Dei-Cas, R. . . . A285 (1989) 320
Bonifacio, R., see Sharp, W.M. . . . A285 (1989) 217
Booske, J.H., V.L. Granatstein, T.M. Antonsen Jr, W.W. Destler, J. Finn, P.E. Latham, B. Levush, I.D. Mayergoyz, D. Radack, J. Rodgers, M.E. Read and A. Linz, Free electron laser with small period wiggler and sheet electron beam: a study of the feasibility of operation at 300 GHz with 1 MW cw output power . . . A285 (1989) 92
Bosch, U., see Schmidt-Ott, W.-D. . . . A285 (1989) 459
Botman, J.I.M., see Ernst, G.J. . . . A285 (1989) 71
Botton, M. and A. Ron, Quasi-linear analysis of a Smith–Purcell free electron amplifier . . . A285 (1989) 257
Bourdon, J.C., see Ortega, J.M. . . . A285 (1989) 97
Bourgeois, P., see Ortega, J.M. . . . A285 (1989) 97
Briand, J.P., J. Dewynck, P. Chevallier and J.L. Bobin, Cold fusion: An alternative diagnostic (*Letter to the Editor*) . . . A285 (1989) 547
Brunet, P., see Ortega, J.M. . . . A285 (1989) 97
Burch, R.H., see Tribble, R.E. . . . A285 (1989) 441

0168-9002/89/$03.50 © Elsevier Science Publishers B.V.
(North-Holland Physics Publishing Division)

Burke, W., see Talmadge, S. . . . A285 (1989) 333
Burov, S., see L3 Collaboration . . . A285 (1989) 403
Buzzi, J.M., see Hartemann, F. . . . A285 (1989) 53
Byers, J.A., see Jong, R.A. . . . A285 (1989) 379

Cai, S.Y., see Bhattacharjee, A. . . . A285 (1989) 158
Caloi, R., see Dattoli, G. . . . A285 (1989) 108
Capell, M., see L3 Collaboration . . . A285 (1989) 403
Carlos, P., see Ortega, J.M. . . . A285 (1989) 97
Carlsten, B.E., see Goldstein, J.C. . . . A285 (1989) 192
Carlsten, B.E., New photoelectric injector design for the Los Alamos National Laboratory XUV FEL accelerator . . . A285 (1989) 313
Carlsten, B.E., see Lumpkin, A.H. . . . A285 (1989) 343
Chaloupka, H., H. Heinrichs, A. Michalke, H. Piel, C.K. Sinclair, F. Ebeling, T. Weiland, U. Klein and H.P. Vogel, A proposed superconducting photoemission source of high brightness . . . A285 (1989) 327
Chang, S.P., see Bhattacharjee, A. . . . A285 (1989) 158
Chaput, R., see Ortega, J.M. . . . A285 (1989) 97
Chen, H.S., see L3 Collaboration . . . A285 (1989) 403
Chen, M., see L3 Collaboration . . . A285 (1989) 403
Chen, S.C., G. Bekefi, S. DiCecca and R. Temkin, Tunable microwigglers for free electron lasers . . . A285 (1989) 290
Chevallier, P., see Briand, J.P. . . . A285 (1989) 547
Chirikov-Zorin, I.E., Yu.I. Davydov, A.A. Feshchenko, V.B. Flyagin, D.G. Jincharadze and P. Strmen, Parallel–series readout for a multiwire drift chamber . . . A285 (1989) 484
Chu, T.S., B.G. Danly and R. Temkin, A gyrotron-powered standing-wave electromagnetic wiggler experiment . A285 (1989) 246
Chumakov, M., see L3 Collaboration . . . A285 (1989) 403
Coçu, F., see Dei-Cas, R. . . . A285 (1989) 320
Coffield, F.E., see Jong, R.A. . . . A285 (1989) 379
Colella, N.J., see Luna, H.B. . . . A285 (1989) 349
Collaboration of Thomson-CSF, see Dei-Cas, R. . . . A285 (1989) 320
Colson, W.B., see Oepts, D. . . . A285 (1989) 204
Couprie, M.E., C. Bazin, M. Billardon and M. Velghe, Spontaneous emission of the Super-ACO FEL optical klystron DOMINO . . . A285 (1989) 31

Dabin, Y., see Ortega, J.M. . . . A285 (1989) 97
Dael, A., see Ortega, J.M. . . . A285 (1989) 97
Danly, B.G., see Bekefi, G. . . . A285 (1989) 230
Danly, B.G., see Chu, T.S. . . . A285 (1989) 246
Dattoli, G., H. Fang, L. Giannessi, M. Richetta, A. Torre and R. Caloi, Parametrizing the gain dependences in a single passage FEL operating with moderate current e-beams . . . A285 (1989) 108
Davis, K.J., see Lumpkin, A.H. . . . A285 (1989) 17
Davydov, Yu.I., see Chirikov-Zorin, I.E. . . . A285 (1989) 484
De Brion, J.P., see Dei-Cas, R. . . . A285 (1989) 320
De Salvo Souza, L., see Sharp, W.M. . . . A285 (1989) 217
Deacon, D.A.G., see Bamford, D.J. . . . A285 (1989) 23
Dei-Cas, R., P. Balleyguier, J. Bardy, A. Bertin, Cl. Bonetti, F. Coçu, J.P. De Brion, J. Frehaut, G. Haouat, J.P. Girardeau-Montaut, A. Herscovici, D. Iracane, S. Joly, J.P. Laget, H. Leboutet, J.G. Marmouget, Y. Pranal, J. Sigaud, S. Striby, J. Vouillarmet and P. Yvon with the Collaboration of Thomson-CSF, Photo-injector, accelerator chain and wiggler development programs for a high peak power rf free electron laser . . . A285 (1989) 320
Deis, G.A., see Shay, H.D. . . . A285 (1989) 163
Deis, G.A., see Jong, R.A. . . . A285 (1989) 379
Destler, W.W., see Booske, J.H. . . . A285 (1989) 92
Dewynck, J., see Briand, J.P. . . . A285 (1989) 547
DiCecca, S., see Chen, S.C. . . . A285 (1989) 290
Dirienzo, A., see Bekefi, G. . . . A285 (1989) 230
Dirienzo, A.C., see Kirkpatrick, D.A. . . . A285 (1989) 43
Dodd, J.W., see Bhattacharjee, A. . . . A285 (1989) 158
Doll, P., G. Fink, M. Haupenthal, R.W. Finlay, S. Hauber, H.O. Klages, H. Schieler, F. Smend and G.-D. Wicke, Pulse shape discrimination with a large NaI crystal . . . A285 (1989) 464
Dyer, F., see Alexeff, I. . . . A285 (1989) 228

Ebeling, F., see Chaloupka, H. . . . A285 (1989) 327

Ebihara, K., see Hiramatsu, S. A285 (1989) 83
Elgin, J.N., Modulational instability in the free electron laser A285 (1989) 144
Elias, L.R., see Kimel, I. A285 (1989) 132
Elliott, C.J., see McVey, B.D. A285 (1989) 186
Enomoto, S., see Nitta, Y. A285 (1989) 540
Ernst, G.J., E.H. Haselhoff, W.J. Witteman, J.I.M. Botman, W. Van Genderen, H.L. Hagedoorn, J.A. Van der Heide and W.J.G.M. Kleeven, Proposal for a race-track microtron with high peak current A285 (1989) 71

Faatz, B., see Van Amersfoort, P.W. A285 (1989) 67
Faatz, B., see Best, R.W.B. A285 (1989) 211
Fagot, J., see Ortega, J.M. A285 (1989) 97
Fallou, J.L., see Ortega, J.M. A285 (1989) 97
Fang, H., see Dattoli, G. A285 (1989) 108
Fawley, W.M., see Sharp, W.M. A285 (1989) 217
Feldman, D.W., see Warren, R.W. A285 (1989) 1
Feldman, D.W., H. Takeda, R.W. Warren, J.E. Sollid, W.E. Stein, W.J. Johnson, A.H. Lumpkin and R.B. Feldman, High extraction efficiency experiments with the Los Alamos free electron laser A285 (1989) 11
Feldman, D.W., see Lumpkin, A.H. A285 (1989) 104
Feldman, D.W., see Sollid, J.E. A285 (1989) 147
Feldman, D.W., see Sollid, J.E. A285 (1989) 153
Feldman, D.W., see Lumpkin, A.H. A285 (1989) 343
Feldman, R.B., see Feldman, D.W. A285 (1989) 11
Feldman, R.B., see Lumpkin, A.H. A285 (1989) 343
Felker, B., see Jong, R.A. A285 (1989) 379
Ferguson, S.W., see Jong, R.A. A285 (1989) 379
Ferrarotto, F. and B. Stella, Low resistivity electrodeless streamer tubes A285 (1989) 426
Feshchenko, A.A., see Chirikov-Zorin, I.E. A285 (1989) 484
Fink, G., see Doll, P. A285 (1989) 464
Finlay, R.W., see Doll, P. A285 (1989) 464
Finn, J., see Booske, J.H. A285 (1989) 92
Fiorito, R.B., see Lumpkin, A.H. A285 (1989) 343
Fliflet, A.W., R.B. McCowan, C.A. Sullivan, D.A. Kirkpatrick, S.H. Gold and W.M. Manheimer, Development of high power CARM oscillators A285 (1989) 233
Flyagin, V.B., see Chirikov-Zorin, I.E. A285 (1989) 484
Fontaine, R.A., see Jong, R.A. A285 (1989) 379
Fornaca, S., see Talmadge, S. A285 (1989) 333
Forycki, A., see Jerrestam, D. A285 (1989) 469
Frehaut, J., see Dei-Cas, R. A285 (1989) 320
Freund, H.P., see Kirkpatrick, D.A. A285 (1989) 43
Freund, H.P., see Pershing, D.E. A285 (1989) 56
Freund, H.P., H. Bluem and R.H. Jackson, Nonlinear theory and design of a harmonic ubitron/free electron laser A285 (1989) 169
Fries, E., see Leon-Gits, S. A285 (1989) 513
Fruchtman, A., Gain reduction in FELs due to diffraction losses A285 (1989) 122
Fumelli, M., F. Jequier and J. Paméla, A new protection system against high voltage vacuum breakdowns A285 (1989) 527

Gagliardi, C.A., see Tribble, R.E. A285 (1989) 441
Galaktionov, Yu., see L3 Collaboration A285 (1989) 403
Ganguly, A.K., see Kirkpatrick, D.A. A285 (1989) 43
Garganne, P., see Ortega, J.M. A285 (1989) 97
Gaupp, A., see Aab, V. A285 (1989) 76
Genz, H., see Aab, V. A285 (1989) 76
Georgeson, G. and F. Milstein, Theoretical study of the dislocation structure in HgI_2 . . . . . A285 (1989) 488
Georgeson, G., see Milstein, F. A285 (1989) 500
Georgeson, G. and F. Milstein, Correlation between plastic deformation parameters and radiation detector quality in HgI_2 . . . . . A285 (1989) 507
Giannessi, L., see Dattoli, G. A285 (1989) 108
Giordano, G., see Thorn, C.E. A285 (1989) 447
Girardeau-Montaut, J.P., see Dei-Cas, R. A285 (1989) 320
Gitomer, S.J., see Sollid, J.E. A285 (1989) 147
Gitomer, S.J., see McVey, B.D. A285 (1989) 186

Gold, S.H., see Fliflet, A.W. . . . A285 (1989) 233
Goldfarb, S., see L3 Collaboration . . . A285 (1989) 403
Goldstein, J.C., see Warren, R.W. . . . A285 (1989) 1
Goldstein, J.C., see Lumpkin, A.H. . . . A285 (1989) 104
Goldstein, J.C., see Moore, G.T. . . . A285 (1989) 176
Goldstein, J.C., see McVey, B.D. . . . A285 (1989) 186
Goldstein, J.C., B.D. McVey, B.E. Carlsten and L.E. Thode, Integrated numerical modeling of free electron laser oscillators . . . A285 (1989) 192
Gong, Z.F., see L3 Collaboration . . . A285 (1989) 403
Gordeev, A., see L3 Collaboration . . . A285 (1989) 403
Gorodkov, Yu., see L3 Collaboration . . . A285 (1989) 403
Gott, Yu.V., Comparative characteristics of atomic particle analyzers with solid and gaseous targets when used at large fusion facilities . . . A285 (1989) 524
Gottschalk, S.C., see Quimby, D.C. . . . A285 (1989) 281
Gover, A., see Jerby, E. . . . A285 (1989) 128
Gover, A., see Sheena, Z. . . . A285 (1989) 224
Gover, A., see Sheena, Z. . . . A285 (1989) 239
Gräf, H.-D., see Aab, V. . . . A285 (1989) 76
Granatstein, V.L., see Booske, J.H. . . . A285 (1989) 92
Gullickson, R.L., see Meyer, T.W. . . . A285 (1989) 369

Haas, C.R., see Neff, W. . . . A285 (1989) 253
Hagedoorn, H.L., see Ernst, G.J. . . . A285 (1989) 71
Hajima, R., see Ohashi, H. . . . A285 (1989) 265
Haouat, G., see Dei-Cas, R. . . . A285 (1989) 320
Hartemann, F. and J.M. Buzzi, High efficiency millimeter-wave free electron laser experiments . . . A285 (1989) 53
Haselhoff, E.H., see Ernst, G.J. . . . A285 (1989) 71
Hauber, S., see Doll, P. . . . A285 (1989) 464
Haupenthal, M., see Doll, P. . . . A285 (1989) 464
Hauss, B.I., see Talmadge, S. . . . A285 (1989) 333
Heinrichs, H., see Chaloupka, H. . . . A285 (1989) 327
Herscovici, A., see Dei-Cas, R. . . . A285 (1989) 320
Herziger, G., see Neff, W. . . . A285 (1989) 253
Hezard, C., see Ortega, J.M. . . . A285 (1989) 97
Hibino, K., see Nishizawa, M. . . . A285 (1989) 532
Higgins, L., see Talmadge, S. . . . A285 (1989) 333
Hiramatsu, S., K. Ebihara, Y. Kimura, J. Kishiro, M. Kumada, H. Kurino, Y. Mizumachi, T. Ozaki and K. Takayama, Proposal for an X-band single-stage FEL . . . A285 (1989) 83
Hobbs, J.S., see Luna, H.B. . . . A285 (1989) 349
Hofland Jr, R. and D.C. Pridmore-Brown, Optically-pumped free electron laser with electrostatic reacceleration A285 (1989) 275
Holm, A., see Jerrestam, D. . . . A285 (1989) 469
Hopkins, D.B., see Jong, R.A. . . . A285 (1989) 379
Hornady, R.S., see Luna, H.B. . . . A285 (1989) 349
Hotta, N., see Nishizawa, M. . . . A285 (1989) 532
Høy-Christensen, P., see Jerrestam, D. . . . A285 (1989) 469

Imasaki, K., see Mima, K. . . . A285 (1989) 47
Iracane, D., see Dei-Cas, R. . . . A285 (1989) 320

Jackson, R.H., see Pershing, D.E. . . . A285 (1989) 56
Jackson, R.H., see Freund, H.P. . . . A285 (1989) 169
James, F.E., see Quimby, D.C. . . . A285 (1989) 281
James, T.W., see Milstein, F. . . . A285 (1989) 500
Jequier, F., see Fumelli, M. . . . A285 (1989) 527
Jerby, E. and A. Gover, Interpretation of wave-profile modification measurements in high-gain Raman free-electron-laser experiments . . . A285 (1989) 128
Jerby, E., see Best, R.W.B. . . . A285 (1989) 211
Jerby, E., see Sneh, A. . . . A285 (1989) 294
Jerrestam, D., A. Forycki, A. Holm, P. Høy-Christensen and T. Jian Shen, Multiprocessor data acquisition for NordBall . . . A285 (1989) 469
Jian Shen, T., see Jerrestam, D. . . . A285 (1989) 469

Jincharadze, D.G., see Chirikov-Zorin, I.E. A285 (1989) 484
Johnson, W.J., see Warren, R.W. A285 (1989) 1
Johnson, W.J., see Feldman, D.W. A285 (1989) 11
Johnson, W.J., see Lumpkin, A.H. A285 (1989) 104
Johnson, W.J., see Sollid, J.E. A285 (1989) 147
Joly, S., see Dei-Cas, R. A285 (1989) 320
Jones, L.W., see L3 Collaboration A285 (1989) 403
Jong, R.A., D.P. Atkinson, J.A. Byers, F.E. Coffield, G.A. Deis, B. Felker, S.W. Ferguson, R.A. Fontaine, D.B. Hopkins, M. Makowski, T.J. Orzechowski, A.C. Paul, E.T. Scharlemann, R.D. Schlueter, B.W. Stallard, R.D. Stever and A.L. Throop, IMP, a free electron laser amplifier for plasma heating in the microwave tokamak experiment A285 (1989) 379
Jong, R.A. and R.R. Stone, Induction-linac based free electron laser amplifier for fusion applications A285 (1989) 387

Kamyshkov, Yu., see L3 Collaboration A285 (1989) 403
Kasahara, K., see Nishizawa, M. A285 (1989) 532
Kawai, T., M. Utsuro and S. Okamoto, Numerical simulation of self-regulating characteristics of a cold neutron source with a closed-thermosiphon A285 (1989) 520
Kawarasaki, Y., M. Ohkubo, K. Mashiko, M. Sugimoto, M. Sawamura, H. Yoshikawa, M. Takabe and N. Shikazono, A linac for a free electron laser oscillator A285 (1989) 338
Kimel, I. and L.R. Elias, Mode competition in long-pulse FELs A285 (1989) 132
Kimura, Y., see Hiramatsu, S. A285 (1989) 83
King, N.S.P., see Lumpkin, A.H. A285 (1989) 17
Kirkpatrick, D.A., G. Bekefi, A.C. Dirienzo, H.P. Freund and A.K. Ganguly, A high power, 600 μm wavelength free electron laser A285 (1989) 43
Kirkpatrick, D.A., see Fliflet, A.W. A285 (1989) 233
Kishiro, J., see Hiramatsu, S. A285 (1989) 83
Kistner, O.C., see Thorn, C.E. A285 (1989) 447
Klages, H.O., see Doll, P. A285 (1989) 464
Kleeven, W.J.G.M., see Ernst, G.J. A285 (1989) 71
Klein, U., see Chaloupka, H. A285 (1989) 327
Kleinman, H., see Sheena, Z. A285 (1989) 239
Klimentov, A., see L3 Collaboration A285 (1989) 403
Kondo, S., see Ohashi, H. A285 (1989) 265
Koutsenko, V., see L3 Collaboration A285 (1989) 403
Krinsky, S., see Yu, L.-H. A285 (1989) 119
Kubota, S., T. Motobayashi, M. Ogiwara, H. Murakami, Y. Ando, J. Ruan(Gen), S. Shirato and T. Murakami, Response of BaF_2, BaF_2-plastic, and BGO scintillators to neutrons with energies between 15 and 45 MeV . . A285 (1989) 436
Kulke, B., see Luna, H.B. A285 (1989) 349
Kumada, M., see Hiramatsu, S. A285 (1989) 83
Kunin, A., see L3 Collaboration A285 (1989) 403
Kurino, H., see Hiramatsu, S. A285 (1989) 83
Kuruma, S., see Mima, K. A285 (1989) 47

L3 Collaboration, A. Arefiev, T. Azemoon, R. Bal, S. Burov, M. Capell, H.S. Chen, M. Chen, M. Chumakov, Yu. Galaktionov, S. Goldfarb, Z.F. Gong, A. Gordeev, Yu. Gorodkov, L.W. Jones, Yu. Kamyshkov, A. Klimentov, V. Koutsenko, A. Kunin, P. Lecomte, P. LeCoultre, J. Lettry, Z.R. Lin, Y.S. Lu, A. Malinin, G.B. Mills, V. Morgunov, V. Plyaskin, V. Pojidaev, B.P. Roe, A. Rozhkov, A. Savin, S. Shevchenko, V. Shevchenko, K. Shmakov, V. Shoutko, E. Shumilov, B. Spiess, E. Tarkovsky, V. Tchoudakov, S.C.C. Ting, K.L. Tung, J. Ulbricht and I. Vorobiev, A detailed study of the performance of the uranium–gas sampling calorimeter A285 (1989) 403
Laget, J.P., see Dei-Cas, R. A285 (1989) 320
Latham, P.E., see Booske, J.H. A285 (1989) 92
Lebert, R., see Neff, W. A285 (1989) 253
Leboutet, H., see Dei-Cas, R. A285 (1989) 320
Lecomte, P., see L3 Collaboration A285 (1989) 403
LeCoultre, P., see L3 Collaboration A285 (1989) 403
Lee, P.S., see Talmadge, S. A285 (1989) 333
Leibovitch, C., see Bekefi, G. A285 (1989) 230
Leon-Gits, S. and E. Fries, Characterization of ground-based and space-based mercuric iodide single crystals by means of X-ray topography and diffractometry A285 (1989) 513
Lettry, J., see L3 Collaboration A285 (1989) 403

Leubner, C., see Steinmüller-Nethl, D. . . . A285 (1989) 307
Levush, B., see Booske, J.H. . . . A285 (1989) 92
Levush, B. and T.M. Antonsen Jr, Nonlinear mode competition and coherence in low gain FEL oscillators A285 (1989) 136
Lin, Z.R., see L3 Collaboration . . . A285 (1989) 403
Linz, A., see Booske, J.H. . . . A285 (1989) 92
Liu Shenggang, A survey of FEL activity in China . . . A285 (1989) 63
Lu, Y.S., see L3 Collaboration . . . A285 (1989) 403
Lumpkin, A.H., see Warren, R.W. . . . A285 (1989) 1
Lumpkin, A.H., see Feldman, D.W. . . . A285 (1989) 11
Lumpkin, A.H., N.S.P. King, M.D. Wilke, S.P. Wei and K.J. Davis, Time-resolved spectral measurements for the Boeing free-electron laser experiments . . . A285 (1989) 17
Lumpkin, A.H., D.W. Feldman, J.E. Sollid, R.W. Warren, W.E. Stein, B.E. Newnam, J.C. Goldstein, W.J. Johnson and J.M. Watson, Proposed extended tuning range for the Los Alamos mid-infrared adjustable, coherent light experiment (MIRACLE) facility . . . A285 (1989) 104
Lumpkin, A.H., R.B. Feldman, D.W. Feldman, S.A. Apgar, B.E. Carlsten, R.B. Fiorito and D.W. Rule, Optical-transition radiation measurements for the Los Alamos and Boeing free-electron laser experiments . . A285 (1989) 343
Lumpkin, A.H., Potential application of the Los Alamos free electron laser: high-temperature superconductors . A285 (1989) 374
Luna, H.B., X.K. Maruyama, N.J. Colella, J.S. Hobbs, R.S. Hornady, B. Kulke and J.V. Palomar, Bremsstrahlung radiation effect in rare earth permanent magnets . . . A285 (1989) 349

Makowski, M., see Jong, R.A. . . . A285 (1989) 379
Malglaive, J.C., see Ortega, J.M. . . . A285 (1989) 97
Malinin, A., see L3 Collaboration . . . A285 (1989) 403
Mandrillon, P. and R. Ostojic, Magnetic field control and orbit studies for H^- acceleration in a 65 MeV cyclotron . . . A285 (1989) 395
Manheimer, W.M., see Fliflet, A.W. . . . A285 (1989) 233
Marmouget, J.G., see Dei-Cas, R. . . . A285 (1989) 320
Marshall, T.C., see Bhattacharjee, A. . . . A285 (1989) 158
Maruyama, X.K., see Luna, H.B. . . . A285 (1989) 349
Mashiko, K., see Kawarasaki, Y. . . . A285 (1989) 338
Mastop, W.J., see Van Amersfoort, P.W. . . . A285 (1989) 67
Matone, G., see Thorn, C.E. . . . A285 (1989) 447
Mayergoyz, I.D., see Booske, J.H. . . . A285 (1989) 92
McCowan, R.B., see Fliflet, A.W. . . . A285 (1989) 233
McVey, B.D., J.C. Goldstein, R.L. Tokar, C.J. Elliott, S.J. Gitomer, M.J. Schmitt and L.E. Thode, Numerical simulations of free electron laser oscillators . . . A285 (1989) 186
McVey, B.D., see Goldstein, J.C. . . . A285 (1989) 192
Meddens, B.J.H., see Van Amersfoort, P.W. . . . A285 (1989) 67
Meyer, T.W., R.L. Gullickson, B.J. Pierce and D.R. Ponikvar, The ground based free electron laser: challenges and solutions . . . A285 (1989) 369
Michalke, A., see Chaloupka, H. . . . A285 (1989) 327
Mills, G.B., see L3 Collaboration . . . A285 (1989) 403
Milstein, F., see Georgeson, G. . . . A285 (1989) 488
Milstein, F., T.W. James and G. Georgeson, Microhardness and microstructure in single crystals of mercuric iodide . . . A285 (1989) 500
Milstein, F., see Georgeson, G. . . . A285 (1989) 507
Mima, K., K. Imasaki, S. Kuruma, T. Akiba, N. Ohigashi, Y. Tsunawaki, K. Tanaka, C. Yamanaka and S. Nakai, Theory and experiment for the induction linac FEL . . . A285 (1989) 47
Mizumachi, Y., see Hiramatsu, S. . . . A285 (1989) 83
Mizutani, K., see Nishizawa, M. . . . A285 (1989) 532
Möhlenkamp, Th., see Schmidt-Ott, W.-D. . . . A285 (1989) 459
Moore, G.T. and J.C. Goldstein, Chirping for efficiency enhancement of the free electron laser . . . A285 (1989) 176
Morgunov, V., see L3 Collaboration . . . A285 (1989) 403
Motobayashi, T., see Kubota, S. . . . A285 (1989) 436
Mouton, B., see Ortega, J.M. . . . A285 (1989) 97
Murakami, H., see Kubota, S. . . . A285 (1989) 436
Murakami, T., see Kubota, S. . . . A285 (1989) 436

Nakai, S., see Mima, K. . . . A285 (1989) 47
Nanjo, H., see Nishizawa, M. . . . A285 (1989) 532
Neff, W., R. Noll, F. Rühl, R. Lebert, C.R. Haas, B. Weikl and G. Herziger, Monochromatic X-ray emission of a fully ionized hydrogen plasma . . . A285 (1989) 253

Newnam, B.E., see Lumpkin, A.H. A285 (1989) 104
Nishizawa, M., K. Hibino, M. Ohnishi, M. Sakata, M. Shima, Y. Yamamoto, H. Sugimoto, K. Taira, M. Shibata, T. Shirai, N. Tateyama, S. Torii, K. Kasahara, To. Saito, T. Yuda, K. Mizutani, N. Hotta, I. Ohta, M. Amenomori and H. Nanjo, A monitoring system of the fast-timing scintillation counters used for detection of air showers A285 (1989) 532
Nitta, Y. and S. Enomoto, Real-time position measuring technique for a moving object with a sealed gamma-ray source attached A285 (1989) 540
Noll, R., see Neff, W. A285 (1989) 253
Nölle, D., Asymmetries of the gain curve A285 (1989) 115

Oepts, D., see Van Amersfoort, P.W. A285 (1989) 67
Oepts, D., A.F.G. Van der Meer, R.W.B. Best, P.W. Van Amersfoort and W.B. Colson, Simulations of mode reduction with an intracavity etalon in an rf-linac based FEL A285 (1989) 204
Oepts, D., see Best, R.W.B. A285 (1989) 211
Ogiwara, M., see Kubota, S. A285 (1989) 436
Ohashi, H., R. Hajima and S. Kondo, Propagation of picosecond electron beams for gas-loaded FELs A285 (1989) 265
Ohigashi, N., see Mima, K. A285 (1989) 47
Ohkubo, M., see Kawarasaki, Y. A285 (1989) 338
Ohnishi, M., see Nishizawa, M. A285 (1989) 532
Ohta, I., see Nishizawa, M. A285 (1989) 532
Okamoto, S., see Ono, M. A285 (1989) 477
Okamoto, S., see Kawai, T. A285 (1989) 520
Ono, M., S. Tasaki and S. Okamoto, Data acquisition system of a time-of-flight analyzer for use in a multi-detector assembly for neutron scattering experiments A285 (1989) 477
Ortega, J.M., M. Bergher, R. Chaput, A. Dael, M. Velghe, Y. Petroff, J.C. Bourdon, R. Belbeoch, P. Brunet, Y. Dabin, B. Mouton, J.P. Perrine, E. Plouvier, R. Pointal, M. Renard, M. Roch, J. Rodier, P. Roudier, Y. Thiery, P. Bourgeois, P. Carlos, C. Hezard, J. Fagot, J.L. Fallou, P. Garganne, J.C. Malglaive and D.T. Tran, CLIO: Collaboration for an Infrared Laser at Orsay A285 (1989) 97
Orzechowski, T.J., see Jong, R.A. A285 (1989) 379
Ostiguy, J.F., see Segall, S.B. A285 (1989) 355
Ostojic, R., see Mandrillon, P. A285 (1989) 395
Ozaki, T., see Hiramatsu, S. A285 (1989) 83

Palomar, J.V., see Luna, H.B. A285 (1989) 349
Paméla, J., see Fumelli, M. A285 (1989) 527
Paul, A.C., see Jong, R.A. A285 (1989) 379
Perrine, J.P., see Ortega, J.M. A285 (1989) 97
Pershing, D.E., R.H. Jackson, H.P. Freund and H. Bluem, The K_u-band ubitron experiment at the Naval Research Laboratory A285 (1989) 56
Petroff, Y., see Ortega, J.M. A285 (1989) 97
Piel, H., see Chaloupka, H. A285 (1989) 327
Pierce, B.J., see Meyer, T.W. A285 (1989) 369
Pissanetzky, S. and P. Tompkins, 3-D magnetic field calculations for wigglers using magnus-3D A285 (1989) 303
Plouvier, E., see Ortega, J.M. A285 (1989) 97
Plyaskin, V., see L3 Collaboration A285 (1989) 403
Pointal, R., see Ortega, J.M. A285 (1989) 97
Pojidaev, V., see L3 Collaboration A285 (1989) 403
Ponikvar, D.R., see Meyer, T.W. A285 (1989) 369
Pranal, Y., see Dei-Cas, R. A285 (1989) 320
Pridmore-Brown, D.C., see Hofland Jr, R. A285 (1989) 275

Quimby, D.C., S.C. Gottschalk, F.E. James, K.E. Robinson, J.M. Slater and A.S. Valla, Development of a 10-meter wedged-pole undulator A285 (1989) 281

Radack, D., see Booske, J.H. A285 (1989) 92
Rader, M., see Alexeff, I. A285 (1989) 228
Read, M.E., see Booske, J.H. A285 (1989) 92
Renard, M., see Ortega, J.M. A285 (1989) 97
Richetta, M., see Dattoli, G. A285 (1989) 108
Richter, A., see Aab, V. A285 (1989) 76
Robinson, K.E., see Quimby, D.C. A285 (1989) 281

Roch, M., see Ortega, J.M. A285 (1989) 97
Rodgers, J., see Booske, J.H. A285 (1989) 92
Rodier, J., see Ortega, J.M. A285 (1989) 97
Roe, B.P., see L3 Collaboration A285 (1989) 403
Rohatgi, R., see Shahal, O. A285 (1989) 299
Ron, A., see Botton, M. A285 (1989) 257
Ron, A., see Schächter, L. A285 (1989) 261
Roudier, P., see Ortega, J.M. A285 (1989) 97
Rozhkov, A., see L3 Collaboration A285 (1989) 403
Ruan, J., see Kubota, S. A285 (1989) 436
Rühl, F., see Neff, W. A285 (1989) 253
Rule, D.W., see Lumpkin, A.H. A285 (1989) 343
Ruschin, S., see Sheena, Z. A285 (1989) 224
Ruschin, S., see Sheena, Z. A285 (1989) 239

Saito, To., see Nishizawa, M. A285 (1989) 532
Sakata, M., see Nishizawa, M. A285 (1989) 532
Sandorfi, A.M., see Thorn, C.E. A285 (1989) 447
Savin, A., see L3 Collaboration A285 (1989) 403
Sawamura, M., see Kawarasaki, Y. A285 (1989) 338
Schächter, L. and A. Ron, Smith–Purcell amplifier in a regime of exponential gain A285 (1989) 261
Schaerf, C., see Thorn, C.E. A285 (1989) 447
Scharlemann, E.T., see Shay, H.D. A285 (1989) 163
Scharlemann, E.T., see Jong, R.A. A285 (1989) 379
Schieler, H., see Doll, P. A285 (1989) 464
Schlueter, R.D., see Jong, R.A. A285 (1989) 379
Schmidt-Ott, W.-D., U. Bosch and Th. Möhlenkamp, PIN-diodes for electron detection A285 (1989) 459
Schmitt, M.J., see McVey, B.D. A285 (1989) 186
Segall, S.B. and J.F. Ostiguy, Beam spill in long wigglers A285 (1989) 355
Sessler, A.M., see Sharp, W.M. A285 (1989) 217
Shahal, O. and R. Rohatgi, Pulsed wire magnetic field measurements on a 4.3 m long wiggler A285 (1989) 299
Sharp, W.M., W.M. Fawley, S.S. Yu, A.M. Sessler, R. Bonifacio and L. De Salvo Souza, Simulation of superradiant free electron lasers A285 (1989) 217
Shay, H.D., G.A. Deis, E.T. Scharlemann and T.E. Smith Jr, Tapering FEL amplifiers in wiggler period and field A285 (1989) 163
Sheena, Z., A. Gover and S. Ruschin, Simulation and animation of electron motion in the ponderomotive potential of laser beats A285 (1989) 224
Sheena, Z., S. Ruschin, A. Gover and H. Kleinman, Experimental study of the interaction of an electron beam with the ponderomotive potential of laser beats A285 (1989) 239
Shevchenko, S., see L3 Collaboration A285 (1989) 403
Shevchenko, V., see L3 Collaboration A285 (1989) 403
Shibata, M., see Nishizawa, M. A285 (1989) 532
Shikazono, N., see Kawarasaki, Y. A285 (1989) 338
Shima, M., see Nishizawa, M. A285 (1989) 532
Shirai, T., see Nishizawa, M. A285 (1989) 532
Shirato, S., see Kubota, S. A285 (1989) 436
Shmakov, K., see L3 Collaboration A285 (1989) 403
Shoutko, V., see L3 Collaboration A285 (1989) 403
Shumilov, E., see L3 Collaboration A285 (1989) 403
Sigaud, J., see Dei-Cas, R. A285 (1989) 320
Sinclair, C.K., see Chaloupka, H. A285 (1989) 327
Slater, J.M., see Quimby, D.C. A285 (1989) 281
Smend, F., see Doll, P. A285 (1989) 464
Smith Jr, T.E., see Shay, H.D. A285 (1989) 163
Sneh, A. and E. Jerby, Coaxially fed folded foil electromagnet wiggler A285 (1989) 294
Sollid, J.E., see Warren, R.W. A285 (1989) 1
Sollid, J.E., see Feldman, D.W. A285 (1989) 11
Sollid, J.E., see Lumpkin, A.H. A285 (1989) 104
Sollid, J.E., D.W. Feldman, R.W. Warren, H. Takeda, S.J. Gitomer, W.J. Johnson and W.E. Stein, Sideband suppression in the Los Alamos free electron laser using a Littrow grating A285 (1989) 147
Sollid, J.E., D.W. Feldman and R.W. Warren, Sideband suppression for free electron lasers A285 (1989) 153

Sollid, J.E., see Takeda, H. A285 (1989) 197
Spiess, B., see L3 Collaboration A285 (1989) 403
Stallard, B.W., see Jong, R.A. A285 (1989) 379
Stein, W.E., see Warren, R.W. A285 (1989) 1
Stein, W.E., see Feldman, D.W. A285 (1989) 11
Stein, W.E., see Lumpkin, A.H. A285 (1989) 104
Stein, W.E., see Sollid, J.E. A285 (1989) 147
Steinmüller, D., see Steinmüller-Nethl, D. A285 (1989) 307
Steinmüller-Nethl, D., D. Steinmüller and C. Leubner, Spectral and angular distribution of radiation from advanced wigglers with sharply peaked magnetic fields A285 (1989) 307
Stella, B., see Ferrarotto, F. A285 (1989) 426
Stever, R.D., see Jong, R.A. A285 (1989) 379
Stone, R.R., see Jong, R.A. A285 (1989) 387
Striby, S., see Dei-Cas, R. A285 (1989) 320
Strmen, P., see Chirikov-Zorin, I.E. A285 (1989) 484
Sugimoto, H., see Nishizawa, M. A285 (1989) 532
Sugimoto, M., see Kawarasaki, Y. A285 (1989) 338
Sullivan, C.A., see Fliflet, A.W. A285 (1989) 233

Taira, K., see Nishizawa, M. A285 (1989) 532
Takabe, M., see Kawarasaki, Y. A285 (1989) 338
Takayama, K., see Hiramatsu, S. A285 (1989) 83
Takeda, H., see Feldman, D.W. A285 (1989) 11
Takeda, H., see Sollid, J.E. A285 (1989) 147
Takeda, H. and J.E. Sollid, One-dimensional simulation of a free electron laser oscillator using a diffraction grating as a cavity mirror A285 (1989) 197
Talmadge, S., W. Burke, S. Fornaca, B.I. Hauss, L. Higgins, P.S. Lee, S. Texter and H.R. Thompson Jr, Electron beam measurements on the first stage of the HPMC high brightness gun A285 (1989) 333
Tanaka, K., see Mima, K. A285 (1989) 47
Tarkovsky, E., see L3 Collaboration A285 (1989) 403
Tasaki, S., see Ono, M. A285 (1989) 477
Tateyama, N., see Nishizawa, M. A285 (1989) 532
Tchoudakov, V., see L3 Collaboration A285 (1989) 403
Temkin, R., see Chu, T.S. A285 (1989) 246
Temkin, R., see Chen, S.C. A285 (1989) 290
Tervisidis, F., N. Tsagas and J.C. Bates, Development of an isotropic velocity distribution in stored ultracold neutrons and its effect on the measurement of neutron lifetime: A computational study A285 (1989) 431
Texter, S., see Talmadge, S. A285 (1989) 333
Thiery, Y., see Ortega, J.M. A285 (1989) 97
Thode, L.E., see McVey, B.D. A285 (1989) 186
Thode, L.E., see Goldstein, J.C. A285 (1989) 192
Thompson Jr, H.R., see Talmadge, S. A285 (1989) 333
Thorn, C.E., G. Giordano, O.C. Kistner, G. Matone, A.M. Sandorfi, C. Schaerf and C.S. Whisnant, The LEGS electron spectrometer for tagging backscattered photons A285 (1989) 447
Throop, A.L., see Jong, R.A. A285 (1989) 379
Ting, S.C.C., see L3 Collaboration A285 (1989) 403
Tokar, R.L., see McVey, B.D. A285 (1989) 186
Tompkins, P., see Pissanetzky, S. A285 (1989) 303
Torii, S., see Nishizawa, M. A285 (1989) 532
Torre, A., see Dattoli, G. A285 (1989) 108
Tran, D.T., see Ortega, J.M. A285 (1989) 97
Tran, T.-M., see Best, R.W.B. A285 (1989) 211
Tribble, R.E., R.H. Burch and C.A. Gagliardi, MARS: A momentum achromat recoil spectrometer A285 (1989) 441
Tsagas, N., see Tervisidis, F. A285 (1989) 431
Tsunawaki, Y., see Mima, K. A285 (1989) 47
Tung, K.L., see L3 Collaboration A285 (1989) 403

Ulbricht, J., see L3 Collaboration A285 (1989) 403
Utsuro, M., see Kawai, T. A285 (1989) 520

Valla, A.S., see Quimby, D.C. A285 (1989) 281

Van Amersfoort, P.W., R.W.B. Best, B. Faatz, C.A.J. Van der Geer, W.J. Mastop, B.J.H. Meddens, A.F.G. Van der Meer, D. Oepts and M.J. Van der Wiel, Status of the Dutch free electron laser for infrared experiments . A285 (1989) 67
Van Amersfoort, P.W., see Oepts, D. . . . A285 (1989) 204
Van Amersfoort, P.W., see Best, R.W.B. . . . A285 (1989) 211
Van der Geer, C.A.J., see Van Amersfoort, P.W. . . . A285 (1989) 67
Van der Heide, J.A., see Ernst, G.J. . . . A285 (1989) 71
Van der Meer, A.F.G., see Van Amersfoort, P.W. . . . A285 (1989) 67
Van der Meer, A.F.G., see Oepts, D. . . . A285 (1989) 204
Van der Wiel, M.J., see Van Amersfoort, P.W. . . . A285 (1989) 67
Van Genderen, W., see Ernst, G.J. . . . A285 (1989) 71
Velghe, M., see Couprie, M.E. . . . A285 (1989) 31
Velghe, M., see Ortega, J.M. . . . A285 (1989) 97
Vogel, H.P., see Chaloupka, H. . . . A285 (1989) 327
Vorobiev, I., see L3 Collaboration . . . A285 (1989) 403
Vouillarmet, J., see Dei-Cas, R. . . . A285 (1989) 320

Wachtel, J.M., see Ben-Zvi, I. . . . A285 (1989) 364
Warren, R.W., J.E. Sollid, D.W. Feldman, W.E. Stein, W.J. Johnson, A.H. Lumpkin and J.C. Goldstein, Near-ideal lasing with a uniform wiggler . . . A285 (1989) 1
Warren, R.W., see Feldman, D.W. . . . A285 (1989) 11
Warren, R.W., see Lumpkin, A.H. . . . A285 (1989) 104
Warren, R.W., see Sollid, J.E. . . . A285 (1989) 147
Warren, R.W., see Sollid, J.E. . . . A285 (1989) 153
Watson, J.M., see Lumpkin, A.H. . . . A285 (1989) 104
Wei, S.P., see Lumpkin, A.H. . . . A285 (1989) 17
Weikl, B., see Neff, W. . . . A285 (1989) 253
Weiland, T., see Chaloupka, H. . . . A285 (1989) 327
Weise, H., see Aab, V. . . . A285 (1989) 76
Whisnant, C.S., see Thorn, C.E. . . . A285 (1989) 447
Wicke, G.-D., see Doll, P. . . . A285 (1989) 464
Wilke, M.D., see Lumpkin, A.H. . . . A285 (1989) 17
Witteman, W.J., see Ernst, G.J. . . . A285 (1989) 71

Yamamoto, Y., see Nishizawa, M. . . . A285 (1989) 532
Yamanaka, C., see Mima, K. . . . A285 (1989) 47
Yoshikawa, H., see Kawarasaki, Y. . . . A285 (1989) 338
Yu, L.-H. and S. Krinsky, Amplified spontaneous emission in a single pass free electron laser . . . A285 (1989) 119
Yu, S.S., see Sharp, W.M. . . . A285 (1989) 217
Yuda, T., see Nishizawa, M. . . . A285 (1989) 532
Yvon, P., see Dei-Cas, R. . . . A285 (1989) 320

Żakowicz, W., Guidance and concentration of radiation by a hollow dielectric waveguide . . . A285 (1989) 269

Nuclear Instruments and Methods in Physics Research A285 (1989) 561–564
North-Holland, Amsterdam

SUBJECT INDEX

Accelerators, Beam Handling and Targets

Magnetic field control and orbit studies for H^- acceleration in a 65 MeV cyclotron, Mandrillon, P. and R. Ostojic A285 (1989) 395

Instruments and Methods for High Energy Physics

A detailed study of the performance of the uranium–gas sampling calorimeter, L3 Collaboration, A. Arefiev, T. Azemoon, R. Bal, S. Burov, M. Capell, H.S. Chen, M. Chen, M. Chumakov, Yu. Galaktionov, S. Goldfarb, Z.F. Gong, A. Gordeev, Yu. Gorodkov, L.W. Jones, Yu. Kamyshkov, A. Klimentov, V. Koutsenko, A. Kunin, P. Lecomte, P. LeCoultre, J. Lettry, Z.R. Lin, Y.S. Lu, A. Malinin, G.B. Mills, V. Morgunov, V. Plyaskin, V. Pojidaev, B.P. Roe, A. Rozhkov, A. Savin, S. Shevchenko, V. Shevchenko, K. Shmakov, V. Shoutko, E. Shumilov, B. Spiess, E. Tarkovsky, V. Tchoudakov, S.C.C. Ting, K.L. Tung, J. Ulbricht and I. Vorobiev A285 (1989) 403
Low resistivity electrodeless streamer tubes, Ferrarotto, F. and B. Stella A285 (1989) 426

Instruments and Methods for Nuclear Spectroscopy

Development of an isotropic velocity distribution in stored ultracold neutrons and its effect on the measurement of neutron lifetime: A computational study, Tervisidis, F., N. Tsagas and J.C. Bates A285 (1989) 431
Response of BaF_2, BaF_2-plastic, and BGO scintillators to neutrons with energies between 15 and 45 MeV, Kubota, S., T. Motobayashi, M. Ogiwara, H. Murakami, Y. Ando, J. Ruan(Gen), S. Shirato and T. Murakami A285 (1989) 436
MARS: A momentum achromat recoil spectrometer, Tribble, R.E., R.H. Burch and C.A. Gagliardi A285 (1989) 441
The LEGS electron spectrometer for tagging backscattered photons, Thorn, C.E., G. Giordano, O.C. Kistner, G. Matone, A.M. Sandorfi, C. Schaerf and C.S. Whisnant A285 (1989) 447
PIN-diodes for electron detection, Schmidt-Ott, W.-D., U. Bosch and Th. Möhlenkamp A285 (1989) 459
Pulse shape discrimination with a large NaI crystal, Doll, P., G. Fink, M. Haupenthal, R.W. Finlay, S. Hauber, H.O. Klages, H. Schieler, F. Smend and G.-D. Wicke A285 (1989) 464

Computer Automated Measurement and Control

Multiprocessor data acquisition for NordBall, Jerrestam, D., A. Forycki, A. Holm, P. Høy-Christensen and T. Jian Shen A285 (1989) 469
Data acquisition system of a time-of-flight analyzer for use in a multi-detector assembly for neutron scattering experiments, Ono, M., S. Tasaki and S. Okamoto A285 (1989) 477

Nuclear Electronics

Parallel–series readout for a multiwire drift chamber, Chirikov-Zorin, I.E., Yu.I. Davydov, A.A. Feshchenko, V.B. Flyagin, D.G. Jincharadze and P. Strmen A285 (1989) 484

Nuclear Electronics – Compound Semiconductors for Room Temperature X-Ray and Nuclear Detectors

Theoretical study of the dislocation structure in HgI_2, Georgeson, G. and F. Milstein A285 (1989) 488
Microhardness and microstructure in single crystals of mercuric iodide, Milstein, F., T.W. James and G. Georgeson A285 (1989) 500
Correlation between plastic deformation parameters and radiation detector quality in HgI_2, Georgeson, G. and F. Milstein A285 (1989) 507

0168-9002/89/$03.50 © Elsevier Science Publishers B.V.
(North-Holland Physics Publishing Division)

Characterization of ground-based and space-based mercuric iodide single crystals by means of X-ray topography and diffractometry, Leon-Gits, S. and E. Fries A285 (1989) 513

Numerical and Data Analysis

Numerical simulation of self-regulating characteristics of a cold neutron source with a closed-thermosiphon, Kawai, T., M. Utsuro and S. Okamoto A285 (1989) 520

Fusion

Comparative characteristics of atomic particle analyzers with solid and gaseous targets when used at large fusion facilities, Gott, Yu.V. A285 (1989) 524
A new protection system against high voltage vacuum breakdowns, Fumelli, M., F. Jequier and J. Paméla A285 (1989) 527
Cold fusion: An alternative diagnostic (*Letter to the Editor*), Briand, J.P., J. Dewynck, P. Chevallier and J.L. Bobin A285 (1989) 547

Dosimetry, Space Radiation and Medical Applications

A monitoring system of the fast-timing scintillation counters used for detection of air showers, Nishizawa, M., K. Hibino, M. Ohnishi, M. Sakata, M. Shima, Y. Yamamoto, H. Sugimoto, K. Taira, M. Shibata, T. Shirai, N. Tateyama, S. Torii, K. Kasahara, To. Saito, T. Yuda, K. Mizutani, N. Hotta, I. Ohta, M. Amenomori and H. Nanjo A285 (1989) 532

Synchrotron Radiation Research

Proceedings of the 10th International Free Electron Laser Conference (Jerusalem, Israel, August 29–September 2, 1988)

Section I. Low gain FEL (oscillator) experiments

Near-ideal lasing with a uniform wiggler, Warren, R.W., J.E. Sollid, D.W. Feldman, W.E. Stein, W.J. Johnson, A.H. Lumpkin and J.C. Goldstein A285 (1989) 1
High extraction efficiency experiments with the Los Alamos free electron laser, Feldman, D.W., H. Takeda, R.W. Warren, J.E. Sollid, W.E. Stein, W.J. Johnson, A.H. Lumpkin and R.B. Feldman A285 (1989) 11
Time-resolved spectral measurements for the Boeing free-electron laser experiments, Lumpkin, A.H., N.S.P. King, M.D. Wilke, S.P. Wei and K.J. Davis A285 (1989) 17
Measurement of the coherent harmonics emitted in the Mark III free electron laser, Bamford, D.J. and D.A.G. Deacon A285 (1989) 23
Spontaneous emission of the Super-ACO FEL optical klystron DOMINO, Couprie, M.E., C. Bazin, M. Billardon and M. Velghe A285 (1989) 31

Section II. High gain and collective regime experiments

A high power, 600 μm wavelength free electron laser, Kirkpatrick, D.A., G. Bekefi, A.C. Dirienzo, H.P. Freund and A.K. Ganguly A285 (1989) 43
Theory and experiment for the induction linac FEL, Mima, K., K. Imasaki, S. Kuruma, T. Akiba, N. Ohigashi, Y. Tsunawaki, K. Tanaka, C. Yamanaka and S. Nakai A285 (1989) 47
High efficiency millimeter-wave free electron laser experiments, Hartemann, F. and J.M. Buzzi A285 (1989) 53
The K_u-band ubitron experiment at the Naval Research Laboratory, Pershing, D.E., R.H. Jackson, H.P. Freund and H. Bluem A285 (1989) 56

Section III. New proposals and status reports

A survey of FEL activity in China, Liu Shenggang A285 (1989) 63
Status of the Dutch free electron laser for infrared experiments, Van Amersfoort, P.W., R.W.B. Best, B. Faatz, C.A.J. Van der Geer, W.J. Mastop, B.J.H. Meddens, A.F.G. Van der Meer, D. Oepts and M.J. Van der Wiel A285 (1989) 67
Proposal for a race-track microtron with high peak current, Ernst, G.J., E.H. Haselhoff, W.J. Witteman, J.I.M. Botman, W. Van Genderen, H.L. Hagedoorn, J.A. Van der Heide and W.J.G.M. Kleeven A285 (1989) 71
Status of the Darmstadt near-infrared free-electron-laser project, Aab, V., K. Alrutz-Ziemssen, H. Genz, H.-D. Gräf, A. Richter, H. Weise and A. Gaupp A285 (1989) 76

Proposal for an X-band single-stage FEL, Hiramatsu, S., K. Ebihara, Y. Kimura, J. Kishiro, M. Kumada, H. Kurino, Y. Mizumachi, T. Ozaki and K. Takayama A285 (1989) 83
Free electron laser with small period wiggler and sheet electron beam: a study of the feasibility of operation at 300 GHz with 1 MW cw output power, Booske, J.H., V.L. Granatstein, T.M. Antonsen Jr, W.W. Destler, J. Finn, P.E. Latham, B. Levush, I.D. Mayergoyz, D. Radack, J. Rodgers, M.E. Read and A. Linz A285 (1989) 92
CLIO: Collaboration for an Infrared Laser at Orsay, Ortega, J.M., M. Bergher, R. Chaput, A. Dael, M. Velghe, Y. Petroff, J.C. Bourdon, R. Belbeoch, P. Brunet, Y. Dabin, B. Mouton, J.P. Perrine, E. Plouvier, R. Pointal, M. Renard, M. Roch, J. Rodier, P. Roudier, Y. Thiery, P. Bourgeois, P. Carlos, C. Hezard, J. Fagot, J.L. Fallou, P. Garganne, J.C. Malglaive and D.T. Tran A285 (1989) 97
Proposed extended tuning range for the Los Alamos mid-infrared adjustable, coherent light experiment (MIRACLE) facility, Lumpkin, A.H., D.W. Feldman, J.E. Sollid, R.W. Warren, W.E. Stein, B.E. Newnam, J.C. Goldstein, W.J. Johnson and J.M. Watson A285 (1989) 104

Section IV. FEL theory in the linear regime

Parametrizing the gain dependences in a single passage FEL operating with moderate current e-beams, Dattoli, G., H. Fang, L. Giannessi, M. Richetta, A. Torre and R. Caloi A285 (1989) 108
Asymmetries of the gain curve, Nölle, D. A285 (1989) 115
Amplified spontaneous emission in a single pass free electron laser, Yu, L.-H. and S. Krinsky A285 (1989) 119
Gain reduction in FELs due to diffraction losses, Fruchtman, A. A285 (1989) 122
Interpretation of wave-profile modification measurements in high-gain Raman free-electron-laser experiments, Jerby, E. and A. Gover A285 (1989) 128

Section V. FEL theory in the non-linear regime

Mode competition in long-pulse FELs, Kimel, I. and L.R. Elias A285 (1989) 132
Nonlinear mode competition and coherence in low gain FEL oscillators, Levush, B. and T.M. Antonsen Jr A285 (1989) 136
Modulational instability in the free electron laser, Elgin, J.N. A285 (1989) 144
Sideband suppression in the Los Alamos free electron laser using a Littrow grating, Sollid, J.E., D.W. Feldman, R.W. Warren, H. Takeda, S.J. Gitomer, W.J. Johnson and W.E. Stein A285 (1989) 147
Sideband suppression for free electron lasers, Sollid, J.E., D.W. Feldman and R.W. Warren A285 (1989) 153
Sideband instabilities and optical guiding in a free electron laser: experiment and theory, Bhattacharjee, A., S.Y. Cai, S.P. Chang, J.W. Dodd and T.C. Marshall A285 (1989) 158
Tapering FEL amplifiers in wiggler period and field, Shay, H.D., G.A. Deis, E.T. Scharlemann and T.E. Smith Jr A285 (1989) 163
Nonlinear theory and design of a harmonic ubitron/free electron laser, Freund, H.P., H. Bluem and R.H. Jackson A285 (1989) 169
Chirping for efficiency enhancement of the free electron laser, Moore, G.T. and J.C. Goldstein A285 (1989) 176

Section VI. Numerical simulations

Numerical simulations of free electron laser oscillators, McVey, B.D., J.C. Goldstein, R.L. Tokar, C.J. Elliott, S.J. Gitomer, M.J. Schmitt and L.E. Thode A285 (1989) 186
Integrated numerical modeling of free electron laser oscillators, Goldstein, J.C., B.D. McVey, B.E. Carlsten and L.E. Thode A285 (1989) 192
One-dimensional simulation of a free electron laser oscillator using a diffraction grating as a cavity mirror, Takeda, H. and J.E. Sollid A285 (1989) 197
Simulations of mode reduction with an intracavity etalon in an rf-linac based FEL, Oepts, D., A.F.G. Van der Meer, R.W.B. Best, P.W. Van Amersfoort and W.B. Colson A285 (1989) 204
3D particle simulation and 3D linear model analysis of FELIX, Best, R.W.B., B. Faatz, D. Oepts, P.W. Van Amersfoort, E. Jerby and T.-M. Tran A285 (1989) 211
Simulation of superradiant free electron lasers, Sharp, W.M., W.M. Fawley, S.S. Yu, A.M. Sessler, R. Bonifacio and L. De Salvo Souza A285 (1989) 217
Simulation and animation of electron motion in the ponderomotive potential of laser beats, Sheena, Z., A. Gover and S. Ruschin A285 (1989) 224

Section VII. Unconventional FEL schemes

Recent results on the Orbitron Maser, Alexeff, I., F. Dyer and M. Rader A285 (1989) 228
A 35 GHz cyclotron autoresonance maser amplifier, Bekefi, G., A. Dirienzo, C. Leibovitch and B.G. Danly . . . A285 (1989) 230
Development of high power CARM oscillators, Fliflet, A.W., R.B. McCowan, C.A. Sullivan, D.A. Kirkpatrick, S.H. Gold and W.M. Manheimer A285 (1989) 233
Experimental study of the interaction of an electron beam with the ponderomotive potential of laser beats, Sheena, Z., S. Ruschin, A. Gover and H. Kleinman A285 (1989) 239

A gyrotron-powered standing-wave electromagnetic wiggler experiment, Chu, T.S., B.G. Danly and R. Temkin . A285 (1989) 246
Monochromatic X-ray emission of a fully ionized hydrogen plasma, Neff, W., R. Noll, F. Rühl, R. Lebert, C.R. Haas, B. Weikl and G. Herziger A285 (1989) 253
Quasi-linear analysis of a Smith–Purcell free electron amplifier, Botton, M. and A. Ron A285 (1989) 257
Smith–Purcell amplifier in a regime of exponential gain, Schächter, L. and A. Ron A285 (1989) 261
Propagation of picosecond electron beams for gas-loaded FELs, Ohashi, H., R. Hajima and S. Kondo A285 (1989) 265
Guidance and concentration of radiation by a hollow dielectric waveguide, Żakowicz, W. A285 (1989) 269
Optically-pumped free electron laser with electrostatic reacceleration, Hofland Jr, R. and D.C. Pridmore-Brown A285 (1989) 275

Section VIII. Wigglers, undulators

Development of a 10-meter wedged-pole undulator, Quimby, D.C., S.C. Gottschalk, F.E. James, K.E. Robinson, J.M. Slater and A.S. Valla A285 (1989) 281
Tunable microwigglers for free electron lasers, Chen, S.C., G. Bekefi, S. DiCecca and R. Temkin A285 (1989) 290
Coaxially fed folded foil electromagnet wiggler, Sneh, A. and E. Jerby A285 (1989) 294
Pulsed wire magnetic field measurements on a 4.3 m long wiggler, Shahal, O. and R. Rohatgi A285 (1989) 299
3-D magnetic field calculations for wigglers using magnus-3D, Pissanetzky, S. and P. Tompkins A285 (1989) 303
Spectral and angular distribution of radiation from advanced wigglers with sharply peaked magnetic fields, Steinmüller-Nethl, D., D. Steinmüller and C. Leubner A285 (1989) 307

Section IX. System performance, electron optics and beam transport

New photoelectric injector design for the Los Alamos National Laboratory XUV FEL accelerator, Carlsten, B.E. A285 (1989) 313
Photo-injector, accelerator chain and wiggler development programs for a high peak power rf free electron laser, Dei-Cas, R., P. Balleyguier, J. Bardy, A. Bertin, Cl. Bonetti, F. Coçu, J.P. De Brion, J. Frehaut, G. Haouat, J.P. Girardeau-Montaut, A. Herscovici, D. Iracane, S. Joly, J.P. Laget, H. Leboutet, J.G. Marmouget, Y. Pranal, J. Sigaud, S. Striby, J. Vouillarmet and P. Yvon with the Collaboration of Thomson-CSF A285 (1989) 320
A proposed superconducting photoemission source of high brightness, Chaloupka, H., H. Heinrichs, A. Michalke, H. Piel, C.K. Sinclair, F. Ebeling, T. Weiland, U. Klein and H.P. Vogel A285 (1989) 327
Electron beam measurements on the first stage of the HPMC high brightness gun, Talmadge, S., W. Burke, S. Fornaca, B.I. Hauss, L. Higgins, P.S. Lee, S. Texter and H.R. Thompson Jr A285 (1989) 333
A linac for a free electron laser oscillator, Kawarasaki, Y., M. Ohkubo, K. Mashiko, M. Sugimoto, M. Sawamura, H. Yoshikawa, M. Takabe and N. Shikazono A285 (1989) 338
Optical-transition radiation measurements for the Los Alamos and Boeing free-electron laser experiments, Lumpkin, A.H., R.B. Feldman, D.W. Feldman, S.A. Apgar, B.E. Carlsten, R.B. Fiorito and D.W. Rule A285 (1989) 343
Bremsstrahlung radiation effect in rare earth permanent magnets, Luna, H.B., X.K. Maruyama, N.J. Colella, J.S. Hobbs, R.S. Hornady, B. Kulke and J.V. Palomar A285 (1989) 349
Beam spill in long wigglers, Segall, S.B. and J.F. Ostiguy A285 (1989) 355
Computation of emittance growth in a focusing wiggler FEL, Ben-Zvi, I. and J.M. Wachtel A285 (1989) 364

Section X. FEL applications

The ground based free electron laser: challenges and solutions, Meyer, T.W., R.L. Gullickson, B.J. Pierce and D.R. Ponikvar A285 (1989) 369
Potential application of the Los Alamos free electron laser: high-temperature superconductors, Lumpkin, A.H. . A285 (1989) 374
IMP, a free electron laser amplifier for plasma heating in the microwave tokamak experiment, Jong, R.A., D.P. Atkinson, J.A. Byers, F.E. Coffield, G.A. Deis, B. Felker, S.W. Ferguson, R.A. Fontaine, D.B. Hopkins, M. Makowski, T.J. Orzechowski, A.C. Paul, E.T. Scharlemann, R.D. Schlueter, B.W. Stallard, R.D. Stever and A.L. Throop A285 (1989) 379
Induction-linac based free electron laser amplifier for fusion applications, Jong, R.A. and R.R. Stone A285 (1989) 387

Special Applications

Real-time position measuring technique for a moving object with a sealed gamma-ray source attached, Nitta, Y. and S. Enomoto A285 (1989) 540

Letter to the Editor

Cold fusion: An alternative diagnostic, Briand, J.P., J. Dewynck, P. Chevallier and J.L. Bobin A285 (1989) 547